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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,497	09/19/2003	Alexander T. Chenvainu	00216-616001 / OB-211	9179
26161	7590	05/16/2006		
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/666,497	Applicant(s) CHENVAINU ET AL.	
	Examiner Laura C. Guidotti	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35 and 37-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35 and 37-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Information Disclosure Statement

1. The Examiner has received and considered EP 0857026 B1. A notation of this will be made on the form PTO-892.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 35, 38, 39, 43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al., US 2004/0154112 (herein referred to as Braun '112) as evidenced by Paffrath, USPN 6,363,565 in view of Braun et al., USPN 6,553,604 (herein referred to as Braun '604).

Braun '112 discloses the claimed invention including a handle (not shown, attached to the neck; paragraph 27), a neck extending from the handle (14), a motor within a handle (paragraph 27), extending from the neck, a head (112) including a support member (116), the support member including a lower portion (lowermost portion of 116 as shown in Figure 2B, see Figures 2A-2B) constructed to be rotationally oscillated relative to the neck by the motor (paragraph 27, Figure 2B), and a top surface having an elongated shape that is elliptical (paragraph 33), a major axis of the elongated shape being disposed generally parallel to the long axis of the handle (see Figure 2), a plurality of tufts of bristles extending from the support member (18, 28), and a plurality of elastomeric fins extending from the support member (30, 34, 36, 40, 44, 46, 50, 722, 924) and extending from the support member (see Figures 3-4), each elastomeric fin having a textured surface (paragraph 45). Regarding claims 38-39 and 45-46, the tufts of bristles and elastomeric fins have at least three different heights and it appears that the tufts of bristles and elastomeric fins in combination are arranged so that their tips define a rounded contour (see Figure 2A). Braun '112 is directed to a toothbrush head for a power toothbrush (paragraph 27) and some of the structure that

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cause oscillation are shown in Figure 2B. As evidenced by Paffrath, particularly in Figure 1, is that the toothbrush head, including the support member, are releasable to a handle portion that houses a motor, and rotational oscillatory motion is provided (Column 5 Lines 42-56, Column 6 Lines 15-26, Column 7 Lines 13-35). Therefore, although not explicitly shown in Braun '112, as evidenced by Paffrath, the head and including the support member of Braun '112 is capable of being configured for releasable attachment to a power toothbrush. Braun '112 does not include a plurality of elastomeric fins pivotably mounted in and extending from the support member.

Braun '604 discloses a toothbrush having a support member (12) that is capable of being attached to a power toothbrush, the support member including a lower portion (bottom surface of "12", not shown) capable of being oscillated and a top surface (upper surface of "12" shown in Figure 1) having an elongated shape such as an oval (see Figure 1), a plurality of tufts of bristles extending from the support member (14), and a plurality of elastomeric fins pivotally mounted in and extending from the support member (16; Column 2 Lines 36-37), each fin having a textured surface (inherently the fin surface has a "texture"). The tufts of bristles and elastomeric fins are arranged so that their tips define a rounded contour (see Figure 1).

It would have been obvious for one of ordinary skill in the art to substitute the elastomeric fins of Braun '112 for elastomeric fins that are pivotably mounted, as Braun '604 teaches, in order to improve interdental penetration between the interdental spaces of teeth when cleaning.

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3. Claims 35, 37-39, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weihrauch, USPN 6,421,867 in view of Brown, Jr. et al., US 2004/0177462.

Weihrauch discloses the claimed invention including a power toothbrush comprising a handle (not shown, attached to rightmost end of "14" in Figure 7), a neck extending from the handle (rightmost end of "14" in Figure 7), inherently a motor in the handle to cause the motion shown by the directional arrows in Figure 7 (Column 3 Lines 41-46), a head including a support member (14), the support member including a lower portion to be rotationally oscillated (lower portion is the bottommost portion of "14"; directional arrow 16, Column 3 Lines 41-46), and a top surface having an elongated shape that appears to be oval or a rounded diamond (see Figures 6 and 8), a major axis of the elongated shape being disposed generally parallel to a long axis of the handle (Figures 6 and 8), and a plurality of tufts of bristles extending from the support member (18). There is also a second group of other tufts of bristles (7) that also extend from the support member in order to clean interdental spaces (Column 2 Lines 15-17), however Weihrauch does not disclose a plurality of elastomeric fins pivotably mounted in and extending from the support member.

Brown, Jr. et al. disclose the claimed invention including a support member (20, 22), the support member including a lower portion (bottom surface portion as shown in Figure 3) and a top surface (upper surface portion as shown in Figure 3) having an elongated shape such as an oval (see Figure 2), a plurality of tufts of bristles extending from the support member (28, 34, 36, or 38), and a plurality of elastomeric fins pivotally

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mounted in and extending from the support member (80; Figures 17-18; Paragraphs 53-54), each fin having a textured surface comprising ribs (82; Paragraph 53). The tufts of bristles and elastomeric fins have at least three different heights (see Figure 3; Paragraphs 33-37 and 54 give specific heights). The tufts of bristles and elastomeric fins are arranged so that their tips define a rounded contour (see Figure 2).

It would have been obvious for one of ordinary skill in the art to substitute the tooth cleaning elements of Weihrauch for the tooth cleaning elements that include both tufts of bristles and a plurality of elastomeric fins pivotably mounted in and extending from the support member, as Brown, Jr. et al. teach, in order to provide bristles for cleaning teeth and elastomeric fins that have textured ribs for enhanced cleaning of interdental spaces.

4. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al., US 2004/0154112 (herein referred to as Braun '112) as evidenced by Paffrath, USPN 6,363,565 in view of Braun et al., USPN 6,553,604 (herein referred to as Braun '604) as applied to Claim 35, in view of Kressner et al., USPN 6,021,538.

Braun '112 and Braun '604 disclose all elements above, however do not disclose specific dimensions of the support member.

Kressner et al. disclose a toothbrush head having a support member with a top surface having an overall surface area from about 170 to 200mm² (Column 3 Lines 47-50; when the diameter is 15mm the area is 176.625 mm².) The top surface has a major of 15mm, which falls into the range of having a length of about 14 to 19 mm and a width of about 12 to 15mm (see Column 3 Lines 47-50).

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It would have been obvious for one of ordinary skill in the art to modify the specific dimensions of the support member of the toothbrush head of Braun '112 and Braun '604 to have an overall surface area from about 170 to 200mm², a length of about 14 to 19 mm, and a width of 12 to 15 mm, as Kressner et al. teach, in order to have a reasonable sized toothbrush head capable of sufficiently cleaning the oral cavity.

5. Claims 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al., US 2004/0154112 (herein referred to as Braun '112) as evidenced by Paffrath, USPN 6,363,565 in view of Braun et al., USPN 6,553,604 (herein referred to as Braun '604) as applied to Claim 43 in view of Kressner et al., USPN 6,021,538.

Braun '112 and Braun '604 disclose all elements above, however do not disclose specific dimensions of the support member.

Kressner et al. disclose a toothbrush head having a support member with a top surface having an overall surface area from about 170 to 200mm² (Column 3 Lines 47-50; when the diameter is 15mm the area is 176.625 mm².) The top surface has a major of 15mm, which falls into the range of having a length of about 14 to 19 mm and a width of about 12 to 15mm (see Column 3 Lines 47-50).

It would have been obvious for one of ordinary skill in the art to modify the specific dimensions of the support member of the toothbrush head of Braun '112 and Braun '604 to have an overall surface area from about 170 to 200mm², a length of about 14 to 19 mm, and a width of 12 to 15 mm, as Kressner et al. teach, in order to have a reasonable sized toothbrush head capable of sufficiently cleaning the oral cavity.

Response to Arguments

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6. Applicant's arguments with respect to claims 35 and 37-49 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone

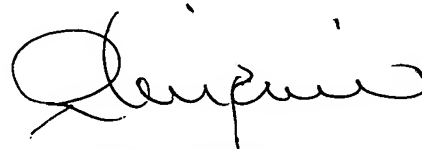
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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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